WO 2005/069262

24

PCT/EP2004/053603

Claims

15

20

- 1. Method for processing video data (R, G, B) to be displayed on a display screen (10) by
- providing said video data (R, G, B) having video levels selected from a predetermined number of video levels,
 - encoding said predetermined number of video levels with a corresponding number of codewords and
- illuminating pixels in a central area of said display
 screen (10) in accordance with said codewords,
 characterized by
 - illuminating pixels in a border area surrounding said central area of said display screen (10) by using only those codewords of said number of codewords, which have a constant bit value in a selectable part of the codewords.
 - 2. Method according to claim 1, wherein codewords, which have a binary 0 between two binary 1 are not used for illuminating said border area.
 - 3. Method according to claim 1 or 2, wherein video levels corresponding to codewords being not used are recreated by dithering.
- 4. Method according to one of the preceding claims, wherein said part of the codewords having constant bit value is determined by a power level of a picture to be displayed.
- 5. Method according to one of the preceding claims,
 30 wherein said part of the codewords being determined to have
 constant bit value includes the most significant bits of the
 codewords.
 - 6. Method according to one of the preceding claims,

 wherein the border area is divided into several sub-areas, a
 first one of said several sub-areas being illuminated by
 codewords with a first selectable part of constant bit value

WO 2005/069262 PCT/EP2004/053603

and a second one of said several areas being illuminated by codewords with a second selectable part of constant bit value, which second selectable part includes the first selectable part of codewords or at least a portion of it or which is different from the first selectable part.

25

7. Method according to one of the preceding claims, wherein cells of the display screen are subjected to dynamic priming.

8. Device for processing video data (R, G, B) to be displayed on a display screen (10) including

- data providing means for providing said video data having video levels selected from a predetermined number of video levels,
- encoding means for encoding said predetermined number of video levels with a corresponding number of codewords and
- illuminating means for illuminating pixels in a central area of said display screen (10) in accordance with said codewords,

characterized in that

5

10

15

20

25

35

- said illuminating means is adapted for illuminating pixels in a border area surrounding said central area of said display screen by using only those codewords of said number of codewords, which have a constant bit value in a selectable part of the codewords.
- 9. Device according to claim 8, wherein codewords which have a binary 0 between two binary 1, are not used for illuminating said border area.
 - 10. Device according to claim 8 or 9, further including dithering means (6) for recreating video levels corresponding to codewords being not used.
 - 11. Device according to one of the claims 8 to 10, further including a power level determining means (2) for determin-

WO 2005/069262 PCT/EP2004/053603

26

ing the power level (APL) of said video data (R, G, B), so that said part of the codewords having constant bit value is determinable on the basis of said power level (APL).

- 12. Device according to one of the claims 8 to 11, wherein said part of the codewords being determined to have constant bit value includes the most significant bits of the codewords.
- 13. Device according to one of the claims 8 to 12, wherein said illuminating means is adapted to divide said border area into several sub-areas, a first one of said several sub-areas being illuminable by codewords with a first selectable part of constant bit value and a second one of said several sub-areas being illuminable by codewords with a second selectable part of constant bit value, which second selectable part includes the first selectable part of codewords or at least a portion of it or which is different from the first selectable part.

20

14. Device according to one of the claims 8 to 13, further including dynamic priming means for dynamically priming cells of the display screen (10).